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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/670,865	09/27/2000	Boon-Lock Yeo	YO9-97-348C	7873
7590 05/27/2009 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER RAMAN, USHA	
			ART UNIT	PAPER NUMBER
			2424	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/670,865

**Applicant(s)**

YEO ET AL.

**Examiner**

USHA RAMAN

**Art Unit**

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-23, 25, 26 and 28-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-23, 36 and 37 is/are allowed.
- 6) ☒ Claim(s) 25, 26, 28-35 and 38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 11, 2009 has been entered.

***Response to Arguments***

2. Applicant's arguments filed on February 11<sup>th</sup>, 2009 have been fully considered but they are not persuasive.

Applicant argues (see Remarks page 17) with respect to claim 25 that, "it would have not been obvious to modify Goldberg to playback at a real time speed as this modification would at least render Goldberg unsuitable for its intended purpose". Examiner respectfully disagrees. Goldberg for example discloses that programs can be played at "up to two (2) times its normal speed". See column 4 lines 57-59. In this instance "up to" is understood to be merely an upper limit on the rate of playback, and accordingly includes all rates below the limit value. Furthermore even when considering applicant's arguments that a user can select only accelerated playback option, if a user views a program after a significant delay since the program begins (e.g. user joins in 20 minutes after a program has begun, wherein the program duration is only 30 minutes), even when playing back the program at an accelerated rate (up to 2-times the normal speed) would mean that the program has

preempted prior to user having fully caught up. In such a scenario, the summary frames would be displayed until the viewer has completed watching the program even though the transmission of the program has preempted. For these reasons stated above, it is submitted that the system of Goldberg modified in view of Connelly teaches all the limitations of claim 25.

Examiner further notes that applicant did not traverse the examiner's assertion of official notice in claims 28 (that it was well known to delete display of windows by closing it) or claim 32 (that it was well known to intersperse program with advertisements). Accordingly, these common knowledge statements are taken to be admitted prior art. See MPEP § 2144.03

Applicant's arguments with respect to claims 30-35 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

3. Claims 21-23, and 36-37 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach at least one preview frame displayed at a same time as at least one summary frame and the video program in progress when a programming channel is changed, wherein the summary frame comprises a past frame from the video program in progress and the preview frame comprises a future frame from the video program in progress relative to a real time broadcast of the video program in progress.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25-26, 28-29, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US Pat. 5,692,213) in view of Connelly (US Pat. 6,144,376).

With regards to claim 25, Goldberg discloses a user interactive video viewing system where user may view multimedia presentations such as video conference, comprising the claimed "display screen for viewing a video program in progress" (see column 3, lines 15-23). Goldberg discloses a scenario wherein a user may join a video program in progress after a portion of it has already transpired, wherein the system of Goldberg allows a viewer to start over viewing video program from the beginning and/or be caught up to the video program in progress by recording the video program in storage area 612 and allowing users to accessing the video program from the storage area (see column 1, lines 50-56, column 3, lines 49-59, and column 4, lines 5-7). Accordingly in a scenario, where the user selects the video program after 20 minutes of start time, the system displays a plurality of summary frames allowing access to various

portions of the video from its beginning, where the recording commenced, to real time progress of the video. See figure 3, see column 4, lines 15-41. Goldberg therefore teaches the claimed "at least one summary frame displayed on the display screen at a same time and overlaid with said video program" when the video program is selected, wherein the "at least one summary frame comprising one of a past or a future frame from the video program". As Goldberg teaches multiple keyframes allowing access to the different temporal points into the video (see column 4, lines 15-41), Goldberg teaches the claimed limitation of "control means for allowing user to change the video program and for allowing the user to select at least one summary frame to play at least a segment of the video program corresponding to the selected summary frame" and the claimed limitation of, "wherein the at least one summary frame comprises a plurality of said summary frames each corresponding to the video program in progress". Goldberg discloses that programs maybe displayed at a rate selected by the user (column 7 lines 21-23). Therefore in the event user views the program after playback has commenced, and selects to view the program at a normal playback rate, the transmission of program completes prior to the viewer having completed watching the program. The summary frames are accordingly displayed until the viewer has completed watching the program, even though the transmission of the program has preempted.

While Goldberg discloses components interfaced to receive real time multimedia (see column 2, lines 53-56), Goldberg is silent on the step of

selecting the video program by "selecting a program channel" containing the video programming.

In an analogous art, Connelly discloses an integrated PC/TV system providing a plurality of PC functionalities at the television interface, wherein the system comprises an exemplary method of joining a video conference, such as in the system of Goldberg, by changing the channel (see column 7, claim 5). An integrated PC/TV of Connelly allows to bring the functionalities of a PC to the family room where a television is typically located rather than a separate workspace, and at the same time provides the friendly, intuitive user interface (see column 1, lines 58-67 and column 2, lines 1-11).

All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention. By utilizing the PC/TV interface as taught by Connelly to the system of Goldberg gives the user an integrated multimedia system with intuitive, friendly user interface for accessing PC applications, including the video conferencing application via channel change. The modified system therefore additionally teaches the claimed limitation of "at least one summary frame displayed....at a same time and overlaid with the video program when a programming channel is changed".

With regards to claim 26, the system of claim 25 as modified in view of Connelly discloses a viewing system comprising a television system.

With regards to claim 28, Goldberg discloses the window (222) comprises characteristics of "windows in a windowing operation system". While Goldberg is silent on the step of, "wherein user can delete the summary frames from the display screen", Examiner takes official notice that "deletion" of windows in a windowing operation system by closing the windows were well known in the art at the time of the invention. It would be obvious to further modify the system by providing user the option of deleting the summary frames panel (222) in the modified system by closing the window thereby allowing user to close the keyframes panel when the user has caught up to real time progression and no longer needs the panel.

With regards to claim 29, the modified system further teaches the limitation, "wherein the viewing system comprises client connected to a server" (see Goldberg column 3, lines 47-51, lines 57-59).

6. Claims 30, and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagouchi et al. (US Pat. 6,163,345) in view of Schein (US Pat. 6,732,369) and Marshall et al. (US Pat. 5,710,601)

With regards to claim 30, Nagouchi discloses a method of allowing a user to navigate through programs using an electronic program guide. As a user moves through program cells in the EPG, the system tunes to the program in progress corresponding to the highlighted cell. See col. 7 lines 26-56. Accordingly Nagouchi



discloses a method of a viewer changing channel to the video program in the background from a video program on another channel in the background while displaying summary information (i.e. program description) of the video program in progress in the foreground. See col. 7 lines 47-48.

Nagouchi is silent on selecting a plurality of summary frames depicting events from video program in progress, prior to a broadcast transmission of program in progress, embedding the summary frame in the video program in progress, and displaying the summary frames on the foreground of the screen at a same time.

Schein discloses a method of additionally providing the viewer with a video preview comprising a plurality of summary frames depicting selected events from the video program when a viewer highlights the program in an EPG. See col. 22, lines 50-56. Such previews are provided by databases and therefore the summary frames depicting the selected events are selected prior to the broadcast of the video program in progress. See col. 21, lines 36-43. Schein further discloses transmitting the video program in progress comprising summary frames over a media (col. 6, lines 44-55, col. 7, lines 47-50). The preview comprising summary frames are displayed by embedding the summary frames in the display of the video program in progress (see fig. 17B), wherein the summary frames are displayed on the screen at the same time as the video program in progress.

In a further related art, Marshall discloses that providing video summary of comprising scenes from a program can give the viewer a better idea of the program content. See col. 2, lines 51-58.

Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention to additionally display a video clip summary comprising scenes from a highlighted program in the system of Nagouchi, wherein the video clip summary is embedded on a foreground of the screen with the video program in progress in the background. This allows a user to view the live broadcast of a programming channel in that is highlighted in the EPG in a background window, while displaying a video clip summary in the foreground, thereby enabling the viewer to quickly get an idea of the program content on that channel.

With regards to claim 32, Schein discloses displaying advertisements however is silent on playing advertisements in the middle of a program. Examiner further notes that it was well known for a program to be interspersed with a plurality of ads, such that the display of the program is preempted during the play of ads. Schein further discloses that a user views the main programming (video program) in the background window (532) while the preview (summary frame) is overlaid on top. The overlaid window further comprises an exit area that allows the user to exit out of the menu (see column 23 lines 32-33). Therefore in a program interspersed with a plurality of ads, when the display of the program is preempted during the play of ad during a commercial break, the preview window is overlaid on top of the video while the video program has been preempted until the viewer exits the preview window.

With regards to claim 33, Nagouchi discloses a method of allowing a user to navigate through programs using an electronic program guide. As a user moves through program cells in the EPG, the system tunes to the program in progress

corresponding to the highlighted cell. See col. 7 lines 26-56. Accordingly Nagouchi discloses a method of a viewer changing channel to the video program in the background from a video program on another channel in the background while displaying summary information (i.e. program description) of the video program in progress in the foreground. See col. 7 lines 47-48.

Nagouchi is silent on selecting a plurality of summary frames depicting events from video program in progress, prior to a broadcast transmission of program in progress, embedding the summary frame in the video program in progress, and displaying the summary frames on the foreground of the screen at a same time.

Schein discloses a method of additionally providing the viewer with a video preview comprising a plurality of summary frames depicting selected events from the video program when a viewer highlights the program in an EPG. See col. 22, lines 50-56. Such previews are provided by databases and therefore the summary frames depicting the selected events are selected prior to the broadcast of the video program in progress. See col. 21, lines 36-43. Schein further discloses transmitting the video program in progress comprising summary frames over a media (col. 6, lines 44-55, col. 7, lines 47-50). The preview comprising summary frames are displayed by embedding the summary frames in the display of the video program in progress (see fig. 17B), wherein the summary frames are displayed on the screen at the same time as the video program in progress. Schein further discloses that only one preview panel on the EPG menu displays the video preview. Accordingly table displaying the preview panel comprises a single row and a single column of the

preview. Therefore summary frames are written in a row only direction of that table and read in column only directly of the table to display the summary frames on the screen.

In a further related art, Marshall discloses that providing video summary of comprising scenes from a program can give the viewer a better idea of the program content. See col. 2, lines 51-58.

Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention to additionally display a video clip summary comprising scenes from a highlighted program in the system of Nagouchi, wherein the video clip summary is embedded on a foreground of the screen with the video program in progress in the background. This allows a user to view the live broadcast of a programming channel in that is highlighted in the EPG in a background window, while displaying a video clip summary in the foreground, thereby enabling the viewer to quickly get an idea of the program content on that channel. As noted by Marshall, a video summary comprises scenes from a program. Accordingly it is noted that the summary can comprise past scenes relative to the program in progress.

With regards to claim 34, the modified system further disclose placing the video program in progress and the summary frames in designated windows on the screen (see Schein: fig. 17B).

With regards to claim 35, the modified system further discloses that the video program and video program in progress are on different channels (see Nagouchi: col. 7, lines 32-56).

7. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagouchi et al. (US Pat. 6,163,345) in view of Schein (US Pat. 6,732,369) and Marshall et al. (US Pat. 5,710,601) as applied to claim 30 above, and further in view of Daniels (US PG Pub. 2006/0037044)

With regards to claim 31, the modified system is silent on the method of further displaying a video segment corresponding to a particular summary frame when the summary frame is selected by a viewer; and resuming the video program in progress when the video program segment has finished.

In a related art, Daniels discloses a method of allowing a user to select the display of a preview, wherein during the display of the preview the television program is paused so the user does not miss any portion of the television program while trying to understand the preview. See [0014] and [0127].

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system by allowing a user to select the summary frame and display a video segment corresponding to the summary frame and pause the video program in progress while the video of the summary frame is being displayed and resume the video program in progress after the video segment corresponding to the summary frame has finished, so that viewer does not have to miss content from the television programming while concentrating on the video of the summary frame.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to USHA RAMAN whose telephone number is (571)272-7380. The examiner can normally be reached on Mon-Fri: 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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